

Serial No. 09/589,510
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A polynucleotide of the present invention is inclusive of:

D1
(a) a polynucleotide encoding a polypeptide of SEQ ID NOS: 2, 4, 6, 8, 10 and conservatively modified and polymorphic variants thereof, including exemplary polynucleotides of SEQ ID NOS: 1, 3, 5, 7, 9; polynucleotide sequences of the invention also include the maize RuvB polynucleotide sequences as contained in plasmids deposited with American Type Culture Collection (ATCC) and assigned Accession Number 207193.

In the Claims:

Please amend claims 1 and 3 as follows:

- D2 sub E1
1. (Twice Amended) An isolated polynucleotide comprising a member selected from the group consisting of:
 - (a) a nucleic acid sequence having at least 90% sequence identity to SEQ ID NO: 3, wherein the % sequence identity is based on the entire coding region and is calculated by the GAP algorithm under default parameters, wherein the sequence encodes a polypeptide with helicase activity;
 - (b) a nucleic acid sequence which is fully complementary to the nucleic acid sequence of (a).
 3. (Twice amended) A recombinant expression cassette, comprising the polynucleotide of claim 1 operably linked to a promoter.
- D3

Please add new claims 14-28 as follows:

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- D4
14. The isolated polynucleotide of claim 1, wherein the nucleic acid sequence of (a) has at least 95% sequence identity to SEQ ID NO: 3.
15. The isolated polynucleotide of claim 1, wherein the nucleic acid sequence is SEQ ID NO: 3.
16. An isolated polynucleotide comprising at least 100 contiguous nucleotides of SEQ ID NO: 3.
17. An isolated polynucleotide comprising a member selected from the group consisting of:
- (a) a nucleic acid sequence encoding a polypeptide having at least 90% sequence identity of the entire length of SEQ ID NO: 4, as determined by the GAP algorithm under default parameters, wherein the encoded polypeptide has helicase activity; and,
 - (b) a nucleic acid sequence which is fully complementary to the nucleic acid sequence of (a).
18. The isolated polynucleotide of claim 17, wherein the nucleic acid sequence of (a) encodes a polypeptide having at least 95% sequence identity to SEQ ID NO: 4.
19. The isolated polynucleotide of claim 17, wherein the polynucleotide encodes the polypeptide of SEQ ID NO: 4.
20. A recombinant expression cassette comprising the polynucleotide of claim 17 operably linked to a promoter.

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Sub E3 21. A non-human host cell comprising the recombinant expression cassette of claim 20.

22. The host cell of claim 21, wherein the host cell is a plant cell.

D if could 23. A transgenic plant comprising the recombinant expression cassette of claim 20.

24. The transgenic plant of claim 23, wherein said plant is a monocot.

25. The transgenic plant of claim 23, wherein said plant is a dicot.

26. The transgenic plant of claim 23, wherein said plant is selected from the group consisting of maize, soybean, safflower, sunflower, sorghum, canola, wheat, alfalfa, cotton, rice, barley, and millet.

Sub E3 27. A transgenic seed from the transgenic plant of claim 45.

28. An isolated polynucleotide which encodes a polypeptide comprising at least 50 contiguous amino acids of SEQ ID NO: 4.